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Department of Energy

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Fernald Closure Project
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OCT 12 2004

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0009-05

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

ASBESTOS FLOOR TILE REMOVAL FOR THE ADMINISTRATION COMPLEX DECONTAMINATION AND DISMANTLEMENT (D&D) PROJECT

Reference: OU3 Administration Complex Implementation Plan for Above-Grade Decontamination and Dismantlement, FINAL dated February 2002

In the Implementation Plan referenced above, we identified that the asbestos containing floor tile be removed prior to demolition. A careful review of the EPA regulations and guidance documents indicate that removal of the floor tile is not necessary for category I material if it is not rendered friable during demolition activities. Enclosure 1 is enclosed as a summary of that review.

Removal of the tile is a manual operation that increases the safety risk to workers. The use of heavy equipment in demolition is a safety preference. Leaving the tile in place reduces this risk and still provides for the safe management of the floor tile. As the enclosed analysis demonstrates, the current practices at Fernald for demolition, transportation and disposal meet the guidance criteria that allow the floor tile to be left in place. This approach will be safer, compliant and more cost efficient.

As such, we request approval to allow the floor tile to be left in place. The "Asbestos Removal" subsection from Sections 3.1, 3.2 and 3.5 of the referenced document have been updated to incorporate this change. The floor tile has already been removed from the Administration Building, however the floor tile mastic will be left in place. For the remaining affected Administration Complex facilities (Building 11, Services Building and Building 31A, Engine House Garage) the floor tile and mastic will be left in place during demolition.

A copy of the document pages affected by this change is enclosed as Page Change Notice 2 (PCN2) for insertion to the Administration Complex Implementation Plan, FINAL document. Please remove the existing pages affected by this change and replace them with the enclosure.

Certified Asbestos Hazard Evaluation Specialists are fully involved in the planning and the implementation of this Plan. The Hamilton County Department of Environmental Services will be notified of the planned demolition activities to ensure that the Fernald practices meet all of the federal and state air quality requirements.

Please remove the existing implementation plan pages affected by PCN2 and replace them with the enclosure.

If there are any questions concerning this information, please contact Ed Skintik at (513) 312-8806.

Sincerely,

William J. Taylor
Director

FCP:Skintik

Enclosures: As Stated

cc w/enclosure:
G. Griffiths, DOE/OH
J. Reising, OH/FCP
J. Sattler, OH/FCP
E. Skintik, OH/FCP
G. Jablonowski, USEPA-V, SR-6J
T. Schneider, OEPA-Dayton (three copies of enclosure)
F. Bell, ATSDR
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M. Shupe, HIS Geo Trans
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Project Number 1789
AR Coordinator, Fluor Fernald, Inc./MS78

w/o enclosure:
K. Alkema, Fluor Fernald, Inc./MS01
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D. Powell, Fluor Fernald, Inc./MS64
D. Sparks, Fluor Fernald, Inc./MS07
D. Sizemore, Fluor Fernald, Inc./MS02
C. West, Fluor Fernald, Inc./MS52-0
ECDC Fluor Fernald, Inc./MS52-7 Project Number 15000.2.2
Administrative Record Fluor Fernald, Inc./MS78

REQUIREMENTS FOR FLOOR TILE CONTAINING ASBESTOS
FERNALD – SEPTEMBER 16, 2004

Objective: To evaluate regulatory requirements from 40 CFR Part 61 Subpart M and US EPA's guidance manual, Demolition Practices Under The Asbestos NESHAP for the management of asbestos containing floor tiles and make recommendations concerning Fernald's current practices related to the management of asbestos containing floor tiles.

Background:

40 CFR 61.141 defines floor tile containing more than one percent asbestos resilient floor covering, floor tile, as Category I nonfriable asbestos-containing material (ACM). Section 1 of EPA's guidance manual states:

> "The asbestos NESHAP specifies that Category I materials which are not in poor condition and not friable prior to demolition do not have to be removed, except where demolition will be by intentional burning."

The purpose of the manual is to "provide asbestos NESHAP inspectors with information ... to address how specific demolition practices affect Category I and II nonfriable ACM.

Section 3 of the manual states:

> "Category I materials are considered RACM only when they 'will be or have been subjected to sanding, grinding, cutting, or abrading" (Preamble to the November 1990 revised asbestos NESHAP)."

40 CFR 61.141 states:

> "Cutting means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching."

Section 3 of manual states:

> "Although not usually required by the asbestos NESHAP, removal of asbestos-containing resilient floor tiles may occur prior to demolition. Such removal may be required when the substrate to which the floor covering is attached (particle board, wood, concrete) is to be recycled or salvaged."

Section 4, Demolition Practices by Method states:

> Methods of destruction employed at demolition sites include the use of heavy machines, explosions/implosions, and hand methods. All of these methods cause Category II nonfriable ACM to become RACM; however, Category I nonfriable ACM (packings, gaskets, resilient floor coverings, asphaltic roofing materials, mastic) that is not in poor condition and not friable prior to the demolition

operation may be subjected to most of these techniques without becoming RACM."

Section 4 further states:

"Use of heavy machinery during the razing process causes Category II nonfriable ACM, but not Category I nonfriable ACM to become RACM. Use of such equipment during subsequent operations, such as waste consolidation, however, is a major concern which will be addressed in Section 5 of this document."

Section 4 again states:

"Bulldozers and Similar Machinery ... The razing of a building using the heavy machinery described above causes Category II nonfriable ACM, but not Category I nonfriable ACM to become RACM."

"The use of hydraulic excavators during the razing process causes Category II nonfriable ACM, but not Category I nonfriable ACM to become RACM."

"The use of cranes during the razing process does not cause Category I nonfriable ACM to become RACM;"

Section 5, Onsite Waste Handling Procedures, states:

"In general, since cleanup activities such as loading waste debris onto trucks for disposal do not subject nonfriable materials to sanding, grinding, cutting or abrading, such materials are not considered asbestos-containing waste materials and are not regulated by the asbestos NESHAP."

"Use of bulldozers, on the other hand, is expected to have a greater impact on Category I materials. However, EPA has stated that '...if the bulldozer is moving the debris or picking it up to be put in a vehicle and inadvertently runs over Category I material, then it is not subject to the NESHAP standard' (See Appendix I)."

"The use of bulldozers to reduce the volume of Category I materials causes them to become RACM as discussed elsewhere in this manual and in the following EPA correspondence: 'If, after a demolition, material left in the facility...is intentionally ground up (such as repeatedly running over the debris with a bulldozer to compact the material), then 61.150(a)(3) applies.'"

"Reduction by the use of sledgehammers does not normally cause Category I nonfriable ACM to become RACM. The use of pneumatic hammers, however, whether hand-operated or attached to heavy machinery, does cause these materials to become RACM. The use of cranes with clamshells or other heavy

machinery with rakes or buckets to partially reduce Category I nonfriable ACM is permissible if the material is left recognizable in its original form."

Section 6 – Onsite Waste Disposal States:

"As mentioned in other sections of this manual, using heavy machinery to crush demolition debris containing Category I or II nonfriable ACM in place prior to or during burial, can cause the ACM to become RACM subject to the provisions of sections 61.50 (waste disposal) and 61.151 (inactive waste disposal sites) or 61.154 (active waste disposal sites)." Section 5 quoted above clearly states that the use of heavy equipment to reduce volume through multiple passes over the material will generate RACM.

Fernald's demolition activities planned for the Services Building will follow those typical activities described in the EPA manual that do not result in the floor tile becoming RACM. At the OSDF, equipment is used to make multiple passes over the debris to compact the material. This practice may cause the ACM floor tile to become RACM. 40 CFR 61.154 (a) requires: "...there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (c) or (d) of this section must be met." Fernald's standard practice is to prevent any visible emissions to the outside air and meets the regulatory requirement.

If the condition of the floor tile and the demolition practices follow those outlined in the EPA guidance, it is recommended that the floor tile be left in place rather than removed prior to demolition and disposal. Leaving the floor tile in place is protective of the workers and the environment and is more efficient and safer from an industrial safety perspective. It is better to reduce the amount of hand labor and use more heavy equipment.

ADMINISTRATION COMPLEX IMPLEMENTATION PLAN
FOR ABOVE-GRADE
DECONTAMINATION AND DISMANTLEMENT

DOCUMENT NUMBER 1789-PL-0002 (REV. 0) PCN2

PAGE CHANGES

INCLUDES:

COVER PAGE/RECORD OF REVISION

PAGE 27/28

PAGE 29/30

PAGE 33/34